

Claims

What is claimed is:

5 1. A selective noise canceling headset, comprising:
at least one earpiece for reproducing a selected audio
signal;
a microphone for monitoring an external audio signal in
a vicinity of said headset; and

10 10 a selective noise suppression circuit for analyzing
said external audio signal and for selectively reproducing at
least a portion of said external audio signal that is likely to
be of interest to a user.

15 15 2. The selective noise canceling headset of claim 1,
wherein said reproduced portion of said external audio signal is
an alarm audio signal.

20 20 3. The selective noise canceling headset of claim 1,
wherein said reproduced portion of said external audio signal is
acoustically distinct from a general background noise of a local
environment.

25 25 4. The selective noise canceling headset of claim 1,
wherein said reproduced portion of said external audio signal is
associated with speech directed to a user of said headset.

30 30 5. The selective noise canceling headset of claim 1,
wherein said selective noise suppression circuit suppresses said
external audio signal unless a portion of said external audio
signal is likely to be of interest to a user.

6. The selective noise canceling headset of claim 1, wherein said selective noise suppression circuit segments said external audio signal and reproduces only a desired portion of said external audio signal that is likely to be of interest to a user.

7. The selective noise canceling headset of claim 1, wherein said selective noise suppression circuit emphasizes a desired portion of said external audio signal that is likely to be of interest to a user over said selected audio signal.

8. A selective noise canceling device, comprising:
a microphone for monitoring an external audio signal;
and

15 a selective noise suppression circuit for analyzing said external audio signal and for selectively reproducing at least a portion of said external audio signal that is likely to be of interest to a user.

20 9. The selective noise canceling device of claim 8, wherein said reproduced portion of said external audio signal is an alarm audio signal.

25 10. The selective noise canceling device of claim 8, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background noise of a local environment.

30 11. The selective noise canceling device of claim 8, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said device.

12. The selective noise canceling device of claim 8, wherein said selective noise suppression circuit suppresses said external audio signal unless a portion of said external audio signal is likely to be of interest to a user.

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13. The selective noise canceling device of claim 8, wherein said selective noise suppression circuit segments said external audio signal and reproduces only a desired portion of said external audio signal that is likely to be of interest to a user.

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14. The selective noise canceling device of claim 8, wherein said selective noise suppression circuit emphasizes a desired portion of said external audio signal that is likely to be of interest to a user over a selected audio signal.

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15. A selective noise canceling method, comprising:
monitoring an external audio signal;
analyzing said external audio signal; and
selectively reproducing at least a portion of said external audio signal that is likely to be of interest to a user.

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16. The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is an alarm audio signal.

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17. The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background selective noise of a local environment.

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18. The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said method.

5 19. The selective noise canceling method of claim 15, further comprising the step of suppressing said external audio signal unless a portion of said external audio signal is likely to be of interest to a user.

10 20. The selective noise canceling method of claim 15, further comprising the step of segmenting said external audio signal and reproducing only a desired portion of said external audio signal that is likely to be of interest to a user.

15 21. The selective noise canceling method of claim 15, further comprising the step of emphasizing a desired portion of said external audio signal that is likely to be of interest to a user over said selected audio signal.

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